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# **PUBLIC COPY (REDACTED)**

January 31, 2006

Via Hand Delivery

Ms. Marlene H. Dortch Secretary Federal Communications Commission 445 12th Street, S.W. Washington, D.C. 20554

Re: Reply of Mobile Satellites Ventures Subsidiary LLC to the

Oppositions of Stratos Communications, Inc., Telenor Satellite, Inc., and

**Inmarsat Ventures Limited** 

File No. SES-MFS-20051122-01614 (Call Sign E000180)

File No. SES-MFS-20051122-01615 (Call Sign E010050)

File No. SES-MFS-20051122-01616 (Call Sign E010048)

File No. SES-MFS-20051122-01617 (Call Sign E010049)

File No. SES-MFS-20051122-01618 (Call Sign E010047)

File No. SES-MFS-20051123-01626 (Call Sign KA312)

File No. SES-MFS-20051123-01627 (Call Sign KA313)

File No. SES-MFS-20051123-01629 (Call Sign WA28)

File No. SES-MFS-20051123-01630 (Call Sign WB36)

#### Dear Ms. Dortch:

Mobile Satellites Ventures Subsidiary LLC ("MSV") hereby files this redacted, public version of a Reply to the Oppositions of Stratos Communications, Inc. ("Stratos"), Telenor Satellite, Inc. ("Telenor"), and Inmarsat Ventures Limited ("Inmarsat") to MSV's Petition to Hold in Abeyance the above-referenced applications of Stratos and Telenor to shift the operations of certain of their currently authorized L band earth stations in the United States from a coordinated Inmarsat satellite to an uncoordinated Inmarsat satellite (Inmarsat 4F2). As discussed herein, certain information provided in the attached Petition should be treated as confidential.<sup>2</sup>

<sup>&</sup>lt;sup>1</sup> See Stratos Communications, Inc., Application for Modification of Blanket License, File Nos. SES-MFS-20051122-01614 et al (November 22, 2005) ("Stratos Application"); Telenor Satellite, Inc., Application for Modification of Blanket License, File Nos. SES-MFS-20051123-01626 et al (November 23, 2005) ("Telenor Application").

<sup>&</sup>lt;sup>2</sup> 47 C.F.R. § 0.459(b).

47 C.F.R. § 0.459(b)(1) -- Identification of the specific information for which confidential treatment is sought

MSV requests confidential treatment of information relating to the *Mexico City Memorandum of Understanding* and the on-going international L band frequency coordination process which is confidential to the parties to that coordination, which includes the Commission and MSV.<sup>3</sup> When considering other applications to use Inmarsat satellites in the United States, the Commission has acknowledged the confidentiality of this information and has afforded it confidential treatment.<sup>4</sup>

47 C.F.R. § 0.459(b)(2) -- Identification of the Commission proceeding in which the information was submitted or a description of the circumstances giving rise to the submission

This information is being filed in MSV's Reply to the Oppositions of Stratos, Telenor, and Inmarsat to MSV's Petition to Hold in Abeyance the above-referenced applications of Stratos and Telenor.

47 C.F.R. § 0.459(b)(3) -- Explanation of the degree to which the information is commercial or financial, or contains a trade secret or is privileged

As the Commission has acknowledged, the *Mexico City Memorandum of Understanding* and related coordination documents are confidential.<sup>5</sup>

47 C.F.R. § 0.459(b)(4) - Explanation of the degree to which the information concerns a service that is subject to competition

The information contained herein concerns the market for wireless services, in which MSV faces competition from other MSS providers as well as from terrestrial wireless operators.

<sup>&</sup>lt;sup>3</sup> See Memorandum of Understanding for the Intersystem Coordination of Certain Geostationary Mobile Satellite Systems Operating in the Bands 1525-1544/1545-1559 MHz and 1626.5-1646.5/1646.5-1660.5 MHz, Mexico City, Mexico, 18 June 1996.

<sup>&</sup>lt;sup>4</sup> See COMSAT Corporation et. al., Memorandum Opinion, Order and Authorization, 16 FCC Rcd 21661, ¶¶ 111 (2001) ("COMSAT Order") ("The Mexico City Agreement and related coordination documents, such as minutes of coordination meetings, are considered confidential.").

<sup>&</sup>lt;sup>5</sup> *Id*.

47 C.F.R. § 0.459(b)(5) -- Explanation of how disclosure of the information could result in substantial competitive harm

Disclosure of the information for which confidential treatment is sought would result in violation of the *Mexico City Memorandum of Understanding*.

47 C.F.R. § 0.459(b)(6) - Identification of any measures taken by the submitting party to prevent unauthorized disclosure

Disclosure to third parties of the information for which confidential treatment is sought has been strictly pursuant to non-disclosure agreements.

47 C.F.R. § 0.459(b)(7) -- Identification of whether the information is available to the public and the extent of any previous disclosure of the information to third parties

The information for which confidential treatment is sought is not publicly available. Disclosure to third parties of the information for which confidential treatment is sought has been strictly pursuant to non-disclosure agreements.

47 C.F.R. § 0.459(b)(8) - Justification of the period during which the submitting party asserts that material should not be available for public disclosure

The information for which confidential treatment is sought should remain confidential indefinitely or until the parties to the *Mexico City Memorandum of Understanding* agree that it can be made publicly available.

47 C.F.R. § 0.459(b)(9) -- Any other information that the party seeking confidential treatment believes may be useful in assessing whether its request for confidentiality should be granted

N/A.

Please contact the undersigned with any questions.

Very truly yours,

Jennifer A. Manner

# Before the Federal Communications Commission Washington, D.C. 20554

In the matter of	)	
Stratos Communications, Inc. Application for Modification of Earth Station License to Operate with Inmarsat 4F2 at 52.75°W	, ) ) ) )	File No. SES-MFS-20051122-01614 (Call Sign E000180) File No. SES-MFS-20051122-01615 (Call Sign E010050) File No. SES-MFS-20051122-01616 (Call Sign E010048) File No. SES-MFS-20051122-01617 (Call Sign E010049) File No. SES-MFS-20051122-01618 (Call Sign E010047)
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#### CONSOLIDATED REPLY TO OPPOSITIONS

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#### Summary

The responses to MSV's Petition have done nothing to refute the evidence that use of the uncoordinated Inmarsat 4F2 satellite to provide earlier-generation services will result in harmful interference. With respect to each of the three specific concerns MSV described in its Petition, the record continues to provide compelling evidence either that harmful interference will definitely occur or cannot reasonably be expected to be avoided in advance of a coordination agreement covering Inmarsat's new satellite and services.

Inmarsat's continued use of spectrum that it agreed to return to MSV and MSV Canada. MSV demonstrated that Inmarsat's current operations on disputed spectrum are blocking MSV's operations today and that grant of the instant application, to the extent it authorizes Inmarsat operations on the disputed spectrum, would do the same. Inmarsat's response is that it is already illegally using these frequencies today, and causing interference in the process, so it should not matter if it continues to do so in the future. Inmarsat's current illegal actions, however, in no way justify authorizing the same interference on new Inmarsat satellites.

Inmarsat's new satellite is technically different from the satellites Inmarsat has coordinated previously. MSV's Petition described that Inmarsat's new satellite has different technical characteristics than those Inmarsat has coordinated previously, it has not been coordinated, and its uncoordinated operation likely will result in harmful interference. While Inmarsat responds by claiming that it will operate its new Inmarsat 4F2 satellite within the "technical envelope" of its old Inmarsat-3 satellite, this provides no comfort at all because (i) Inmarsat has not coordinated all of its operations in order to establish such a technical envelope; (ii) even if a technical envelope did exist, Inmarsat 4F2 is technically different than the Inmarsat-3 satellite, making it impossible for Inmarsat to operate the new satellite within the technical envelope of its old satellite; and (iii) even if a technical envelope did exist and Inmarsat 4F2 was

capable of operating within it, Inmarsat's current operations have caused harmful interference to MSV, meaning this interference will continue if Inmarsat operates Inmarsat 4F2 within the technical envelope of the Inmarsat-3 satellite.

Inmarsat claims the right to operate throughout the entire MSS L band. MSV's Petition questioned how Inmarsat could commit to operate without causing harmful interference when it is simultaneously claiming the right to operate using any L band frequency it chooses without any clear limitation. In a congested L band, where there are already disputes that are preventing MSV from using its licensed spectrum in order to avoid interference to Inmarsat customers, Inmarsat's claim is particularly alarming. Inmarsat and its distributors fail to identify any rules of the road they will obey in order to effectively preclude harmful interference. As evidenced by its continued claim to be entitled to use the disputed spectrum, its ongoing use of global beams and older satellites that themselves have not been coordinated, and its plan to use the new satellites not to replace the older satellites but to supplement them, it would be unreasonable to expect that Inmarsat can and will operate its new satellite in a manner that does not lead to harmful interference.

The Bureau has demonstrated that it will exercise its spectrum management authority to refrain from authorizing an uncoordinated satellite when there is evidence that interference will result. While the Bureau has authorized foreign-licensed L band satellites in the past, in those cases the satellites in question had completed the ITU coordination process, the operators had mutually committed to using specific frequencies and other operating parameters that would prevent harmful interference, and the terms of their earth station licenses limited them to those operating parameters. In contrast, the new Inmarsat satellite has never been coordinated,

Inmarsat claims the right to operate throughout the band, and the applicants seek licenses that are similarly unlimited.

MSV is not to blame for Inmarsat's failure to coordinate its satellite. It is MSV, not Inmarsat, which has been proactive in trying to advance the coordination process. MSV and MSV Canada are in the process of constructing satellites that will provide approximately 280 spot beams over the United States, enabling much higher capacity broadband services to smaller and less expensive user devices than Inmarsat's system can provide. It is Inmarsat that has blocked MSV's efforts to develop its system. Inmarsat has every incentive to take an anti-competitive position and continue to impede MSV's ability to gain stable, interference-free access to the spectrum needed for MSV's new system. It is Inmarsat that has breeched the trust required for coordination, by refusing to recognize REDACTED , adding more satellites with inefficient global beams, causing unnecessary delay to the Commission's approval of ATC, refusing to return the spectrum it borrowed from MSV and MSV Canada, and, more recently, by refusing to negotiate for stable access to spectrum reconfigured into wider and more contiguous blocks consistent with the Commission's goal of promoting efficient use of spectrum.

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#### CONSOLIDATED REPLY TO OPPOSITIONS

Mobile Satellite Ventures Subsidiary LLC ("MSV") hereby files this Consolidated Reply to the Oppositions<sup>1</sup> filed by Stratos Communications, Inc. ("Stratos"), Telenor Satellite, Inc. ("Telenor"), and Inmarsat Ventures Limited ("Inmarsat") to MSV's Petitions<sup>2</sup> to Hold in Abeyance the above-referenced applications<sup>3</sup> to shift the operations of currently authorized,

<sup>&</sup>lt;sup>1</sup> See Stratos Communications, Inc., Opposition to MSV Petition to Hold In Abeyance, File Nos. SES-MFS-20051122-01614 et al (January 19, 2006) ("Stratos Opposition"); Telenor Satellite, Inc., Opposition, File Nos. SES-MFS-20051123-01626 et al (January 20, 2006) ("Telenor Opposition"); Inmarsat Ventures Ltd., Consolidated Opposition, File Nos. SES-MFS-20051122-01614 et al (January 19, 2006) ("Inmarsat Opposition"). Inmarsat's Opposition was served on counsel for MSV by electronic mail whereas the Stratos and Telenor Oppositions were served on MSV by regular mail. Inmarsat has agreed to provide MSV with an additional three business days to file its Reply to Inmarsat's Opposition, thereby allowing for the same due date for MSV's Reply to all three Oppositions.

<sup>&</sup>lt;sup>2</sup> See MSV, Petition to Hold in Abeyance Stratos Applications, File Nos. SES-MFS-20051122-01614 et al (January 6, 2006) ("MSV Stratos Petition"); MSV, Petition to Hold in Abeyance Telenor Applications, File Nos. SES-MFS-20051123-01626 et al (January 6, 2006) ("MSV Telenor Petition").

earlier-generation L band earth stations in the United States from a coordinated Inmarsat satellite to an uncoordinated Inmarsat satellite ("Inmarsat 4F2"). By holding the applications in abeyance until the conclusion of a coordination agreement, the Bureau will be appropriately exercising its spectrum management authority to prevent harmful interference.<sup>4</sup>

#### **Discussion**

# I. OPERATION OF INMARSAT 4F2 PRIOR TO COORDINATION WILL RESULT IN HARMFUL INTERFERENCE

A. Inmarsat and Its Distributors Have Failed to Rebut the Evidence of Harmful Interference that Will Occur

As proponents of providing service in the United States with an uncoordinated satellite, the burden falls squarely on Inmarsat and its distributors to demonstrate that Inmarsat can operate its uncoordinated satellite on a non-harmful interference basis. Inmarsat and its distributors have utterly failed to meet this burden. Not only do the applicants fail to explain how Inmarsat intends to operate on a non-harmful interference basis, Inmarsat and its distributors fail to rebut the evidence of three separate types of harmful interference that will result both to other L band operators and to Inmarsat from operation of the Inmarsat 4F2 satellite prior to a coordination agreement. MSV Stratos Petition at 11-18; MSV Telenor Petition at 11-18.

<sup>&</sup>lt;sup>3</sup> See Stratos Communications, Inc., Application for Modification of Blanket License, File Nos. SES-MFS-20051122-01614 et al (November 22, 2005) ("Stratos Application"); Telenor Satellite, Inc., Application for Modification of Blanket License, File Nos. SES-MFS-20051123-01626 et al (November 23, 2005) ("Telenor Application").

<sup>&</sup>lt;sup>4</sup> On January 18, 2006, the Bureau granted Stratos and Telenor Special Temporary Authority ("STA") to operate the above-referenced earth stations with Inmarsat 4F2 subject to a number of conditions, including the requirements (i) to operate on an unprotected, non-interference basis and (ii) to demonstrate by February 17, 2006 whether Stratos and Telenor are using loaned frequencies and, if so, what the impact would be if Inmarsat was required to terminate its use of loaned frequencies. *See Stratos STA Grant*, File No. SES-STA-20051216-01760 (January 18, 2006), at ¶ 5; *Telenor STA Grant*, File No. SES-STA-20051216-01756 (January 18, 2006), at ¶ 5. In granting the STA, the Bureau made clear that this grant should not be construed as constituting a finding that Inmarsat can operate Inmarsat 4F2 on a non-interference basis. *Id*.

Interference resulting from Inmarsat's continued use of spectrum that it agreed to return to MSV and MSV Canada. The first type of interference would result from the use of Inmarsat 4F2 to operate on the frequencies Inmarsat has refused to return to MSV and MSV Canada. MSV Stratos Petition at 11-13; MSV Telenor Petition at 11-13. Inmarsat's current use of these frequencies prevents MSV and MSV Canada from using those frequencies to test and deploy their new, hybrid system. This is a real, concrete example of interference that is already occurring today. Inmarsat responds by admitting that it is already illegally using these frequencies today, and causing interference in the process, so it should not matter if it continues to do so in the future. Inmarsat Opposition at 4, 7, 9; see also Stratos Opposition at 8; Telenor Opposition at 5 n.4. The fact that Inmarsat is already causing interference, however, does not mean the Commission should authorize the same interference on new Inmarsat satellites.

Inmarsat and its distributors do not dispute that Inmarsat presently uses L band frequencies that have been coordinated and assigned for use by MSV and MSV Canada nor do they dispute that Inmarsat will use these frequencies on Inmarsat 4F2;<sup>5</sup> rather, they claim that the Commission has condoned such action by allegedly authorizing Inmarsat's existing satellites to operate on every L band frequency.<sup>6</sup> Their interpretation of Commission precedent, however, is simply wrong. In the *TMI Order* and *COMSAT Orders*, the Commission authorized earth stations to operate with L band satellites subject to two conditions both of which are currently

<sup>&</sup>lt;sup>5</sup> When Inmarsat cavalierly states that the Inmarsat 4F2 satellite "will use the same portions of the L-Band that Inmarsat is using today," it admits that it will continue to use loaned-but-recalled frequencies. *Inmarsat Opposition* at 4; see also Stratos Opposition at 11; Telenor Opposition at 2.

<sup>&</sup>lt;sup>6</sup> See Inmarsat Opposition at 7-8 (citing Applications of SATCOM Systems, Inc., TMI Communications and Company, LP, et al., Order and Authorization, 14 FCC Rcd 20798 (1999) ("TMI Order"), aff'd sub nom. AMSC Subsidiary Corp. v. FCC, 216 F.3d 1154 (D.C. Cir. 2000) ("AMSC") and COMSAT Corporation et. al., Memorandum Opinion, Order and Authorization, 16 FCC Rcd 21661 (2001) ("COMSAT Order")); see also Stratos Opposition at 9.

applicable: the Non-Interference Condition<sup>7</sup> and the Spectrum Limitation Condition.<sup>8</sup> The same two conditions have been imposed on earth stations authorized to operate with MSV and MSV Canada as well. *See* Exhibit A. This has the practical effect of limiting each L band operator to using only those L band frequencies it "coordinated for" its satellites in the 1999 Spectrum Sharing Arrangement ("SSA").<sup>9</sup> The Spectrum Limitation Condition was essential because mandating operations pursuant to the spectrum assignments coordinated in the 1999 SSA (*i.e.*, the "most recent" operator-to-operator agreement) was the only way the Commission could rationally conclude that operation in the L band on a non-interference basis was possible. Conversely, if L band operators were permitted to operate using any L band frequencies they desired without regard to the 1999 SSA, interference would inevitably occur. Thus, while a new SSA has not been negotiated since 1999, the Commission has repeatedly confirmed that it continues to effectively govern the operations of L band MSS providers. *See* Exhibit B.

Inmarsat, however, claims that the Spectrum Limitation Condition only applies when there is a coordination agreement in effect that assigns specific frequencies to specific operators.

Inmarsat Opposition at n.22; see also Stratos Opposition at 8. The plain language of the Spectrum Limitation Condition, however, reveals that it applies even when there is no such

<sup>&</sup>lt;sup>7</sup> COMSAT Order ¶ 115(d) ("[i]n the absence of a continuing annual L-band operator-to-operator coordination agreement, operations of METs in the 1525-1559 and 1626.5-1660.5 MHz bands will be on a non-interference basis until a future operator-to-operator agreement is concluded"); *TMI Order* ¶ 64.

<sup>&</sup>lt;sup>8</sup> COMSAT Order ¶ 115(c) ("[o]perations shall be limited to the portions of the 1525-1559 and 1626.5-1660.5 MHz band coordinated for the Inmarsat satellite system in the most recent annual L-Band operator-to-operator agreement"); *TMI Order* ¶ 64.

<sup>&</sup>lt;sup>9</sup> As MSV explained in its Petition, L band frequencies that have been loaned between L band operators have not been "coordinated for" the borrowing operator. *See MSV Stratos Petition* at n.26; *MSV Telenor Petition* at n.26.

coordination agreement in effect. The *COMSAT Order* unambiguously restricts Inmarsat to those portions of the L band "coordinated for" Inmarsat in the "*most recent* annual L-Band operator-to-operator agreement," which refers to the 1999 SSA. *COMSAT Order* at ¶ 115(c) (emphasis added). If the Commission had intended to require that the agreement be in effect at the time of the order, the use of the "most recent" modifier would have been unnecessary because, by definition, any effective operator-to-operator agreement would be the "most recent" one. It is also significant that the Commission imposed the Spectrum Limitation Condition in 2001, with the full knowledge that the 1999 SSA – the "most recent" operator-to-operator agreement – had not been renegotiated. In light of this historical context, the interpretation suggested by Inmarsat is illogical, as it would render the Spectrum Limitation Condition a nullity. Inmarsat's own actions since 1999 demonstrate that it shared the view that the Spectrum Limitation Condition applied even though the 1999 SSA had not been renegotiated. In

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, as is the statement it made in its April 2005 securities filing that "the amount of spectrum available to each operator is currently frozen at the levels agreed in 1999" (citing Inmarsat Global Ltd., Form F-20 (April 29, 2005), at 10 ("Inmarsat April

<sup>&</sup>lt;sup>10</sup> Rather than relying on the plain language of the Commission's decisions, Inmarsat cites *dict*a from *AMSC v. FCC* to support its claim that the Spectrum Limitation Condition only applies when there is a coordination agreement in effect that assigns specific frequencies to specific operators. *Inmarsat Opposition* at 7-8 (citing *AMSC v. FCC*, 216 F.3d at 1159). In fact, in the statement Inmarsat quotes, the court was merely characterizing the facts of the case as presented by AMSC; this was not the court's holding in the case. *See AMSC v. FCC*, 216 F.3d at 1159 ("*AMSC claims*, however, that when there is no coordination agreement in effect SatCom and TMI are free to operate on any frequency . . . .") (emphasis added).

<sup>&</sup>lt;sup>11</sup> Despite Inmarsat's claim, the only legal significance of the failure to negotiate a new SSA is that it triggers the Non-Interference Condition. *Cf. Inmarsat Opposition* at n.22. This Condition requires that in the absence of a "continuing annual L-band operator-to-operator coordination agreement," operations in the L band will be on a "non-interference basis." Nothing in the Non-Interference Condition expands the scope of spectrum on which Inmarsat may provide service in the United States. Rather, the Non-Interference Condition merely provides an additional condition governing Inmarsat operations in the absence of a continuing agreement.

<sup>12</sup> MSV Stratos Petition at 4-5; MSV Telenor Petition at 4-5 (noting that **REDACTED** 

Accordingly, Inmarsat cannot legitimately claim that the Commission has endorsed the interference it is causing today and plans to continue to cause in the future.<sup>13</sup>

While Inmarsat claims that this matter should be resolved pursuant to the *Mexico City*MoU multilateral dispute resolution process, Inmarsat 4F2 is not a replacement satellite under the 
Mexico City MoU and thus this multilateral dispute resolution process is not applicable. 

Inmarsat Opposition at 7; Stratos Opposition at 3; Telenor Opposition at 5 n.4. Inmarsat's 
distributors are currently using frequencies in the United States that they are not authorized to 
use under the terms of their licenses and which Inmarsat now proposes to use on its nextgeneration satellite. This is a simple case of the Commission enforcing an existing license 
condition and ensuring that it is obeyed in the future.

Inmarsat takes language from the *COMSAT Order* out of context in an attempt to support its claim that all L band operators are authorized to use all L band frequencies. *Inmarsat* 

2005 Form F-20") (available at:

http://www.sec.gov/Archives/edgar/data/1291396/000104746905012474/a2156552z20-f.htm))).

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(i) it is not replacing another satellite; (ii) it has much larger on-board power and will cause greater aggregate interference to other L band operators, even when being used exclusively to provide earlier-generation services; and (iii) it will require greater protection from other L band operators, even when being used exclusively to provide earlier-generation services. MSV Stratos Petition at 9; MSV Telenor Petition at 9.

<sup>&</sup>lt;sup>13</sup> The *Outerlink* cases, which Inmarsat cites in its Opposition, demonstrate that the Commission requires L band operators to comply with the 1999 SSA even though a new agreement has not been negotiated since 1999. In the *Outerlink* cases, the Bureau permitted an MSV customer to use frequencies "coordinated for" Inmarsat in the 1999 SSA, but only after Inmarsat consented to these operations based on its conclusion that harmful interference would not occur due to the unique attributes of the Outerlink service. *See Outerlink, Inc., Order and Authorization*, DA 01-664 (April 16, 2001); *Outerlink, Inc., Order and Authorization*, DA 02-1525 (July 2, 2002); *see also* Letter from Donald M. Kennedy, Inmarsat, to Mr. Thomas S. Tycz, FCC, File No. SES-LIC-19980415-00436 (December 19, 2000), at 1 ("As a result of technical discussions and observations, Inmarsat has concluded that uplink transmissions from Outerlink mobile earth stations are not expected to cause harmful interference to Inmarsat's uplink operations."). In contrast, MSV and MSV Canada have not consented to Inmarsat's continued use of loaned-but-recalled frequencies.

Opposition at 8 (citing COMSAT Order ¶ 75). While the Commission in the COMSAT Order stated that specific L band frequency assignments fluctuate from year to year, the Commission was merely explaining the dynamic frequency assignment process resulting from the annual sharing arrangements contemplated in the Mexico City MoU. The Commission was not describing the situation that would result if an annual SSA was not renegotiated. As Inmarsat itself has stated, when a new SSA is not negotiated, spectrum assignments are "frozen" at what was negotiated in the last SSA. See supra note 12.

Interference resulting from technically different parameters of Inmarsat's new satellite relative to the satellites it has coordinated previously. The second type of interference results from the technical differences between Inmarsat 4F2 relative to Inmarsat-3. MSV has demonstrated that these differences will result in greater interference both to other L band operators and to Inmarsat. MSV Stratos Petition at 10-13; MSV Telenor Petition at 10-13. With respect to interference caused by Inmarsat 4F2 to other L band operators, MSV explained that the Inmarsat 4F2 satellite will exhibit a three-fold increase in the number of regional beams to support earlier-generation Inmarsat services. MSV Stratos Petition at 13; MSV Telenor Petition at 13. The number, size, and coverage of the regional beams on Inmarsat 4F2, in conjunction with a significantly larger aggregate EIRP, are not contemplated in the spectrum reuse matrix adopted in the 1999 SSA. Id. Accordingly, ensuring that Inmarsat 4F2 does not cause interference to L band operators requires new mutually-agreed calculations of interference levels, assessment of the acceptability of interference levels by each operator, and careful development of a new and substantially different co-channel reuse spectrum sharing matrix to govern the operation of Inmarsat-4 regional beams vis-à-vis the MSV and MSV Canada systems. *Id*.

Inmarsat's only defense is the unsupported claim that it can provide earlier-generation services over Inmarsat 4F2 on a non-harmful interference basis by operating "within the same technical envelope" as it does today. *Inmarsat Opposition* at 4; see Stratos Opposition at 10; Telenor Opposition at 2. This is no comfort at all for other L band operators for three main reasons. First, Inmarsat has not diligently coordinated all of its operations in order to establish such a "technical envelope." Second, even if a technical envelope for the Inmarsat-3 satellite exists, Inmarsat 4F2 is a technically different satellite. The increased number of regional beams, higher aggregate EIRP, and wideband carriers used on the Inmarsat 4F2 satellite all make it infeasible for Inmarsat to operate within the technical envelope of the Inmarsat-3 satellite. While Telenor claims that the "technical envelope" under which Inmarsat will operate was established in a 1992 bilateral agreement between the U.S. and the United Kingdom, <sup>15</sup> neither Inmarsat nor Telenor have provided a copy of this agreement in the record or to MSV. It is MSV's understanding, however, that this is merely a sharing matrix based on the Inmarsat-3 satellite beam configuration which does not address key technical parameters of L band operations on the Inmarsat 4F2 satellite. Third, even if a technical envelope did exist and Inmarsat 4F2 was capable of operating within it, Inmarsat's current operations have caused harmful interference to MSV, meaning this interference will continue if Inmarsat operates within the technical envelope of the Inmarsat-3 satellite. As MSV explained in its Petition, the wideband carriers Inmarsat operates today on its Inmarsat-3 satellites, including those used to provide its High Speed Data ("HSD") services, have never been coordinated and have resulted in interference to other L band operators. See MSV Stratos Petition at n.29; MSV Telenor Petition at n.29. Inmarsat does not deny or even address this point in its Opposition. Thus, given the interference MSV has already

<sup>15</sup> See Telenor Opposition at 2.

recently suffered, Inmarsat's claim that it has "successfully coexisted" with MSV "for almost a decade" is simply not accurate. *Inmarsat Opposition* at 2.<sup>16</sup>

With respect to interference caused to Inmarsat, MSV noted Inmarsat's previous claims that the Inmarsat 4F2 satellite will be far more susceptible than the Inmarsat-3 satellites to co-channel and adjacent channel interference from the operation of current-generation L band satellite terminals operating with other L band systems. \*\*Interpretation\*\* MSV Stratos Petition\*\* at 15-16; MSV Telenor Petition\*\* at 15-16. Inmarsat is silent in response to these points, while Stratos claims that it is "confident" that Inmarsat 4F2 is no more susceptible to interference than Inmarsat-3. Stratos Opposition at 11. Inmarsat's silence and Stratos's unsupported statement do nothing to instill confidence that Inmarsat will not be back to the Commission in the near future complaining that MSV's operations are causing interference to its customers.

Interference resulting from Inmarsat's proposal to operate throughout the entire MSS L band. The third, and perhaps most troubling, type of interference results from Inmarsat's claim to be entitled to use any and all L band frequencies, subject only to an empty commitment to do so on a "non-harmful interference basis." MSV Stratos Petition at 16-18; MSV Telenor Petition

<sup>&</sup>lt;sup>16</sup> Because Inmarsat 4F2 is not a replacement satellite under the *Mexico City MoU*, it has no rights under that agreement. *See supra* note 14. While Inmarsat claims that there is nothing in the ITU Radio Regulations that prevents it from operating a new satellite within the "envelope of technical parameters" of another satellite it has been "successfully operating," these assumptions do not apply to the operation of Inmarsat 4F2. *Inmarsat Opposition* at 4. Given the technically different nature of Inmarsat 4F2 relative to the Inmarsat-3 satellites, along with the fact that services provided over Inmarsat-3 satellites have resulted in harmful interference, Radio Regulation No. 9.6 *et seq* requires prior coordination of Inmarsat 4F2.

<sup>&</sup>lt;sup>17</sup> To be sure, Inmarsat's previous statements regarding the susceptibility of its new satellite were made in the course of the ATC proceeding where it was in Inmarsat's best interests to exaggerate its vulnerability to interference so as to preclude MSV from receiving authority for ATC. Now that it is in Inmarsat's best interests to claim that its new satellite can operate on an unprotected and non-harmful interference basis, Inmarsat not surprisingly tries to hide from its previous statements. But Inmarsat cannot have it both ways.

at 16-18. Neither Inmarsat nor its distributors even attempt to explain how this will be accomplished despite the existing interference in the band, the new technical characteristics of the proposed operations, and the contention among the operators regarding their need for additional spectrum. Moreover, there is nothing in the Stratos or Telenor applications that contain any of the limits that would typically be negotiated in a coordination process to prevent interference.

# B. Inmarsat and its Distributors Have Not Shown Any Precedent to Support Their Position

Despite the claims of Inmarsat and its distributors, Commission precedent does not establish an unequivocal right to operate an uncoordinated satellite in the United States on a non-harmful interference basis. *Inmarsat Opposition* at 9-11; *Stratos Opposition* at 7; *Telenor Opposition* at 5-6. As MSV explained in its Petition, the Bureau has demonstrated that it will not license an uncoordinated satellite conditioned on operation on a non-harmful interference basis

if there is evidence that harmful interference will result.<sup>18</sup> Inmarsat's attempt to distinguish these cases is unavailing.<sup>19</sup>

<sup>18</sup> See MSV Stratos Petition at n.23; MSV Telenor Petition at n.23 (citing Letter from Thomas S. Tycz, FCC, to Joseph A. Godles, Counsel for PanAmSat, File No. SAT-STA-19980902-00057 (September 15, 1998) (refusing to permit PanAmSat to operate C band payload until after coordinating with affected Administrations) ("PanAmSat Order"); Loral Orion Services, Inc., Order and Authorization, DA 99-2222, 14 FCC Rcd 17665, ¶ 10 (October 18, 1999) (refusing to permit Loral to provide commercial service because coordination had not yet been completed and harmful interference would occur absent coordination); BT North America Inc., Order, DA 00-162, 15 FCC Rcd 15602 (February 1, 2000) (granting earth station applications to operate with foreign-licensed satellite only after foreign-licensed satellite operator reached a coordination agreement with affected U.S.-licensed operator); see also AfriSpace, Inc., Order and Authorization, DA 06-4, ¶ 12 (Chief, International Bureau, January 3, 2006) ("[T]he Commission will not authorize new systems that would cause interference to licensed U.S. systems."); MSV-SA Order ¶ 8 (stating that the Commission "will not consider applications for new systems where the new system's operations would cause interference to licensed systems").

<sup>19</sup> Inmarsat Opposition n.31. Inmarsat attempts to distinguish these cases by making the irrelevant point that none of these cases involve the L band or frequencies subject to an agreement like the Mexico City MoU. The fact is that in all of these cases the Bureau refused to permit an uncoordinated satellite to operate when there was evidence that harmful interference would result. The nature of the frequencies at issue was irrelevant.

Inmarsat claims that none of these cases involved a replacement satellite that will operate within the "technical umbrella" of an existing satellite that has operated "interference free" for years. The proposed operation of Inmarsat 4F2, however, does not present these facts either. Rather, Inmarsat 4F2 is not a replacement satellite under the relevant coordination agreement; the evidence demonstrates that it will cause interference; a technical envelope has not been coordinated for the existing satellite; and services provided over the existing satellite have resulted in harmful interference. Under such circumstances, Bureau precedent is clear that prior coordination is required.

Inmarsat claims that the *PanAmSat* case is inapposite because PanAmSat agreed to refrain from operating its C band payload prior to coordination, but the salient fact is that the Bureau did not authorize PanAmSat to launch its satellite until after PanAmSat made this concession.

Inmarsat claims that the *BT North America* case does not apply here because the foreign-licensed satellite operator reached a coordination agreement prior to the Bureau's decision. But that is precisely why the case is relevant here -- the Bureau did not authorize operations with the foreign-licensed satellite until *after* the parties had reached a coordination agreement that addressed the interference concerns.

Inmarsat claims that the *Loral* case does not apply here because harmful interference in that case was a certainty. There is no basis to assume, however, that the interference that will result from operation of Inmarsat 4F2 prior to coordination is any less of a certainty.

The facts of the *TMI Order* and the *COMSAT Order*, which Inmarsat cites, are far different than those presented here. *See Inmarsat Opposition* at 11; *see also Telenor Opposition* at 6. In those cases, it was reasonable for the Commission to conclude that operation on a non-harmful interference basis was possible because the satellites at issue had been coordinated, <sup>20</sup> the operators had committed to using specific frequencies, <sup>21</sup> and the terms of their earth station licenses limited them to those frequencies. <sup>22</sup> By contrast, in this case, Inmarsat is proposing to operate a satellite and provide services (such as HSD services) that are not covered by any coordination agreement, are technically different than any satellite covered by the previous coordination agreement, has never been analyzed by other L band operators, and (according to Inmarsat) will not accept any limitations on the frequencies it will use.

The *Outerlink* case Inmarsat cites demonstrates that the Bureau will not authorize uncoordinated services in the L band in the face of evidence that harmful interference will occur unless and until the services are coordinated among affected L band operators. *Inmarsat*Opposition at 10-11; see supra note 13.<sup>23</sup> In *Outerlink*, the Bureau permitted an MSV customer to provide service using frequencies coordinated for Inmarsat in the 1999 SSA, but only after Inmarsat consented to the operation after concluding, based on discussions with MSV, that

<sup>&</sup>lt;sup>20</sup> The Commission in the *TMI Order* and the *COMSAT Order* was asked to allow foreign-licensed satellites already subject to the *Mexico City MoU* to provide service in the United States. Here, there is no coordination agreement that covers Inmarsat 4F2.

At the time the Commission issued its *TMI* and *COMSAT Orders*, both of the relevant satellite operators (TMI and Inmarsat) had committed to operating in accordance with the 1999 SSA.

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<sup>&</sup>lt;sup>22</sup> COMSAT Order ¶ 115(c) ("[o]perations shall be limited to the portions of the 1525-1559 and 1626.5-1660.5 MHz band coordinated for the Inmarsat satellite system in the most recent annual L-Band operator-to-operator agreement"); *TMI Order* ¶ 64.

<sup>&</sup>lt;sup>23</sup> Outerlink, Inc., Order and Authorization, DA 02-1525 (July 2, 2002).

harmful interference would not occur to Inmarsat and that the MSV customer would not claim protection from interference.<sup>24</sup> Unfortunately, MSV is unable to reach the same conclusion with respect to the operation of the uncoordinated Inmarsat 4F2 satellite because of the technically different nature of the satellite, Inmarsat's failure to discuss the technical parameters of the satellite with other L band operators, and Inmarsat's refusal to refrain from using loaned-but-recalled frequencies.

The Bureau's decisions to license MSV's next generation satellites conditioned on operation on a non-harmful interference basis do not serve as precedent for grant of the present earth station applications to operate with the launched but uncoordinated Inmarsat 4F2 satellite. *Inmarsat Opposition* at 9-10; *Stratos Opposition* at 7; *Telenor Opposition* at 4-5. In the case of MSV-1 and MSV-SA, no entity claimed that the satellites would cause interference, thus there was no reason for the Bureau to refrain from licensing the satellites until after a coordination agreement was reached. Moreover, the MSV-1 and MSV-SA satellites are years away from launch.<sup>25</sup> Where launch of the satellite is years away, it is reasonable for the Commission to conclude that any interference issues will be resolved through coordination prior to actual operation.<sup>26</sup> Also, as stated in the *MSV-1* and *MSV-SA Orders*, any radio station authorization

As Inmarsat explained in that proceeding, "Inmarsat opposes the grant of Outerlink's Application, unless and until the Outerlink service is coordinated between Inmarsat and MSV. The problem here is simple. Inmarsat and MSV have not coordinated the provision of Outerlink's service." *See* Letter from John P. Janka, Counsel for Inmarsat, to Mr. Thomas S. Tycz, FCC, File No. SES-LIC-19980415-00436 (April 23, 2002), at 1.

<sup>&</sup>lt;sup>25</sup> The Bureau licenses domestic satellites several years prior to launch so that operators have the certainty needed to develop their systems as well as to establish construction and launch milestones and complete any necessary international frequency coordination.

<sup>&</sup>lt;sup>26</sup> Similarly, in the 1993 AMSC Order, which Inmarsat cites in its Opposition (Inmarsat Opposition at 6 n.14), the satellite at issue was years away from actual operation, meaning that it was reasonable for the Commission to conclude that interference issues will be resolved through

for which coordination has not been completed may be subject to additional terms and conditions as required to effect coordination of the frequency assignments with other Administrations.<sup>27</sup> Conversely, an earth station application such as that presented here is fundamentally different because it means that operation of the satellite is imminent. In the case of Inmarsat 4F2, the satellite is already in orbit and there is evidence that the satellite will cause interference. When operation of the satellite is imminent, the Bureau cannot simply authorize the service and hope that the interference is someday resolved. Accordingly, because no entity claimed that operation of MSV's next generation satellites will result in interference, the satellites are years away from launch, and the Bureau has not yet had to consider an earth station application to operate with these satellites, the Bureau will not violate or otherwise act inconsistently with the national treatment obligations of the United States under the WTO Basic Telecom Agreement if it were to hold the Stratos and Telenor earth station applications in abeyance pending the outcome of a coordination agreement. Cf. Inmarsat Opposition at 12; Stratos Opposition at 7; Telenor Opposition at 5-6. Indeed, the fact that the Bureau has already permitted Stratos and Telenor to provide earlier-generation services over the coordinated Inmarsat-3 satellites demonstrates that the Bureau will permit foreign-licensed entities to provide L band service in the United States, consistent with the WTO Basic Telecom Agreement, provided it can be assured that harmful interference will not result.<sup>28</sup>

coordination prior to actual operation. See AMSC Subsidiary Corp., Memorandum Opinion and Order, 8 FCC Rcd 4040 (June 14, 1993) ("1993 AMSC Order").

<sup>&</sup>lt;sup>27</sup> See 47 CFR 25.111(b); see also MSV-1 Order ¶ 79; MSV-SA Order ¶ 58.

<sup>&</sup>lt;sup>28</sup> In general, the Bureau's exercise of its spectrum management authority to hold these applications in abevance is consistent with the Chairman's Note to the World Trade Organization ("WTO") Basic Telecommunications Agreement, which states that WTO Members may exercise their domestic spectrum and frequency management policies when considering whether to allow foreign-licensed satellites to service the U.S. market. See MSV Stratos Petition at 8 n.19; MSV

# C. Inmarsat Must Bear Responsibility for Failing to Coordinate Its Satellite in a Timely Manner

Having failed in its legal case to establish that it has a right to operate an uncoordinated satellite despite the evidence of harmful interference, Inmarsat reverts to blaming MSV for its coordination difficulties. *Inmarsat Opposition* at 12-13. This is wrong as to both the problems with the existing coordination and Inmarsat's failure to coordinate its new satellite. Inmarsat was the cause for the breakdown in L band coordination discussions in 1999,

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; in this case, spectrum needed by MSV to satisfy the requirements of large wholesale customers that, with sufficient spectrum access, were prepared to invest in the development of new facilities and services.<sup>29</sup> To make matters worse, Inmarsat persisted in continuing to use substantial amounts of spectrum for inefficient global beam service and to operate an uncoordinated Inmarsat-2 satellite that had been moved to 98°W,

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Telenor Petition at 8 n.19 (citing Chairman of the World Trade Organization Group on Basic Telecommunications, Chairman's Note, Market Access Limitations on Spectrum Availability, 36 I.L.M. at 372 ("under the GATS each Member has the right to exercise spectrum/frequency management")).

# <sup>29</sup> REDACTED

Apart from the *Mexico City MoU*, as the satellite licensing authority for Inmarsat, the administration of the United Kingdom is required to coordinate the new Inmarsat 4F2 satellite network prior to its implementation. *See* ITU Radio Regulations, No. 9.6 *et seq*. Inmarsat, Stratos, and Telenor do not explain why this treaty obligation should be waived for Inmarsat 4F2. Instead, the record demonstrates that this coordination obligation is essential, especially in this case where Inmarsat is asking to be allowed to unilaterally decide spectrum usage and interference issues that normally are subject to negotiation.

If operation of Inmarsat 4F2 in the United States is delayed due to the interference concerns presented here by MSV, this is the fault of Inmarsat and not MSV.<sup>31</sup> Inmarsat has had ample opportunity over the past several years while the Inmarsat-4 satellites were being constructed to complete coordination with other L band operators. Indeed, MSV has been more than willing to discuss coordination with Inmarsat and has reached out to Inmarsat on numerous occasions to discuss coordination issues on a bilateral or a trilateral basis. The blame for the failure to make any progress towards coordinating the Inmarsat-4 satellites in North America rests solely with Inmarsat, which continues to make unreasonable demands, such as its refusal to stop its illegal use of loaned spectrum.<sup>32</sup> It is Inmarsat – not MSV or the Bureau – that holds the key to coordinating Inmarsat-4 satellites and thus permitting their use in the United States.

Inmarsat's motivation is obvious. By depriving its competitor, MSV, of stable access to spectrum and refusing to engage in serious discussions about improving the utility of the L band for broadband services by coordinating wider and more contiguous frequency blocks, Inmarsat apparently hopes to choke investment in MSV's new system. The Commission has identified the promotion of "efficient and effective" use of spectrum as one of its strategic objectives, <sup>33</sup> and it has recognized the assignment of contiguous frequency blocks as a means of achieving this

Despite the claims of Inmarsat and its distributors, MSV is not raising these interference issues in order to gain leverage in coordination or to prevent Inmarsat from operating its new satellite. *Cf. Inmarsat Opposition* at 3; *Stratos Opposition* at 4; *Telenor Opposition* at 2. MSV's only interest is to ensure that L band spectrum can be used in an efficient and equitable manner by all L band operators without having to endure mutual interference.

While Inmarsat claims that MSV has not responded to Inmarsat's recent efforts to coordinate (*Inmarsat Opposition* at 12), MSV has tried to initiate coordination discussions with Inmarsat on numerous occasions. Inmarsat's continued illegal use of loaned frequencies has prevented these discussions from progressing.

<sup>&</sup>lt;sup>33</sup> See FCC, Strategic Plan: 2006-2011 (September 30, 2005).

efficiency.<sup>34</sup> Needless to say, if the Bureau authorizes the use of Inmarsat's new satellite and new services without insisting that they first complete coordination, there are no reasonable prospects that such coordination will ever be successfully completed. The Commission's goals of increasing efficient use of spectrum and promoting broadband services, particularly in rural areas and for the public safety community, will be thwarted. Having said that, however, it is also reasonable to expect that if the parties commit to a good faith effort to complete a comprehensive regional coordination agreement, MSV's view is that it can be completed in a matter of a few months.

# II. THE BUREAU SHOULD ADDRESS THE OTHER ISSUES PRESENTED BY THE APPLICATIONS

Inmarsat and its distributors are non-responsive on the additional issues raised by MSV that warrant further scrutiny. First, they continue to miss the point and argue that Inmarsat 4F2 is a replacement under the Commission's satellite processing rules, while failing to even address MSV's point that Inmarsat 4F2 cannot properly be considered a replacement satellite under the *Mexico City MoU*. Accordingly, the Bureau should make clear that whatever decision it may make regarding whether Inmarsat 4F2 is a replacement satellite under the Commission's rules, it should clarify that such a decision does not mean the satellite is a replacement under the *Mexico City MoU*.

<sup>&</sup>lt;sup>34</sup> See generally Improving Public Safety Communications in the 800 MHz Band, Report and Order, 19 FCC Rcd 14969 (August 6, 2004); Amendment of Part 2 of the Commission's Rules to Allocate Spectrum Below 3 GHz for Mobile and Fixed Services to Support the Introduction of New Advanced Wireless Services, including Third Generation Wireless Systems, Third Report and Order, Third Notice of Proposed Rule Making, and Second Memorandum Opinion and Order, 18 FCC Rcd 2223, ¶ 68 (2003).

<sup>&</sup>lt;sup>35</sup> See MSV Stratos Petition at 9; MSV Telenor Petition at 9.

Second, while MSV agrees with Inmarsat, Stratos, and Telenor that the Commission's rule requiring Fixed Satellite Service ("FSS") satellites to operate with  $\pm 0.05^{\circ}$  East-West station keeping does not apply to MSS satellites, MSV's concern here is only that the Bureau apply this rule consistently, which Inmarsat and its distributors ignore. Thus, to the extent the Bureau authorizes Inmarsat 4F2 for service in the United States with  $\pm 0.1^{\circ}$  East-West station keeping without seeking a waiver, the Bureau must afford similar treatment to other MSS satellites proposing to serve the U.S. market, such as MSV-1 and MSV-SA.

#### Conclusion

Based on the foregoing, the Bureau should hold in abeyance the Stratos and Telenor applications until the conclusion of an L band coordination agreement.

Respectfully submitted,

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#### Exhibit A

# Spectrum Limitation Conditions and Non-Interference Conditions Imposed on L Band MET Licenses

#### **MET Licenses to Access Inmarsat**

- COMSAT Corporation et. al., Memorandum Opinion, Order and Authorization, FCC 01-272, ¶ 115(c)-(d) (2001) (granting application of Stratos, Telenor (f/k/a COMSAT Mobile), Honeywell, and Deere to operate with Inmarsat):
  - "115. IT IS FURTHER ORDERED that the applications listed in Appendix C to operate mobile earth terminals to provide domestic and international Mobile Satellite Service via the privatized Inmarsat system ARE GRANTED subject to the following conditions:

\* \* \*

\* \* \*

- c. Operations shall be limited to the portions of the 1525-1559 and 1626.5-1660.5 MHz band coordinated for the Inmarsat satellite system in the most recent annual L-Band operator-to-operator agreement;
- d. In the absence of a continuing annual L-band operator-to-operator coordination agreement, operations of METs in the 1525-1559 and 1626.5-1660.5 MHz bands will be on a non-interference basis until a future operator-to-operator agreement is concluded. In this instance, each licensee must notify the other four operators in these frequency bands that it will be operating on a non-interference basis. Each licensee must notify its customers that its operations are on a non-interference basis."
- Richtec Incorporated, Order and Authorization, 18 FCC Rcd 3295 (Chief, Satellite Division, International Bureau, March 7, 2003) (granting application to operate D+ terminals with Inmarsat):
  - "17. IT IS FURTHER ORDERED that Richtec's mobile earth station operations shall be limited to the portions of the 1525-1544 and 1626.5-1645.5 MHz band coordinated for the satellite being accessed in the most recent annual L-band operator-to-operator agreement. In the absence of a continuing annual L-band operator-to-operator coordination agreement, Richtec's operation in the 1525-1530 MHz, 1530-1544 MHz, 1626.5-1645.5 MHz frequency bands (lower L-bands) will be on a non-interference basis until a future operator-to-operator agreement is concluded. Richtec shall not cause harmful interference to any other lawfully operating satellite or radio facility and shall cease operations upon notification of such interference. Furthermore, Richtec must notify all other operators in these frequency bands that it will be operating on a non-interference basis. Richtec must also notify its customers in the United States that its operations are on a non-interference basis."

#### MET Licenses to Access MSV and MSV Canada L Band Satellites

- Vistar Data Communications, Inc., Order and Authorization, 17 FCC Rcd 12899 (Deputy Chief, Satellite Division, International Bureau, July 2, 2002) (granting authority to operate half-duplex METs with MSV):
  - "17. IT IS FURTHER ORDERED that Vistar Data Communications, Inc.'s MET operations shall be limited to the portions of the 1525-1559 and 1626.5-1660.5 MHz band coordinated for the satellite being accessed in the most recent annual L-band operator-to-operator agreement.
  - 18. IT IS FURTHER ORDERED that in the absence of a continuing annual operator-to-operator coordination agreement, Vistar Data Communications, Inc.'s operation in the 1525-1559 and 1626.5-1660.5 MHz band will be on a non-harmful interference basis. Consequently, in the absence of a coordination agreement, Vistar Data Communications, Inc. shall not cause harmful interference to any other lawfully operating satellite or radio facility and shall cease operations upon written notification of such interference. Furthermore, Vistar Data Communications, Inc. must notify all other operators in these frequency bands that it will be operating on a non-harmful interference basis. Vistar Data Communications, Inc. must also notify its customers in the United States that its operations are on a non-harmful interference basis."
- Mobile Satellite Ventures Subsidiary LLC, Memorandum Opinion, Order and Authorization, 19 FCC Rcd 4672 (Chief, International Bureau, March 12, 2004) (granting authority to operate additional half-duplex METs with MSV and MSV Canada satellites):
  - "7. IT IS FURTHER ORDERED that Mobile Satellite Ventures Subsidiary LLC's MET operations shall be limited to 2.0 MHz of spectrum in each direction of the 1626.5-1645.5 MHz and 1530-1544 MHz band coordinated for the satellite being accessed in the most recent annual L-band operator-to-operator agreement, and that no additional spectrum will be requested or used.
  - 8. IT IS FURTHER ORDERED that, in the absence of a continuing annual operator-to-operator coordination agreement, Mobile Satellite Ventures Subsidiary LLC's operation in the 1626.5-1645.5 MHz and 1530-1544 MHz band will be on a non-harmful interference basis. Consequently, in the absence of a coordination agreement, Mobile Satellite Ventures Subsidiary LLC shall not cause harmful interference to any other lawfully operating satellite or radio facility and shall cease operations upon written notification of such interference. Furthermore, Mobile Satellite Ventures Subsidiary LLC must notify all other operators in these frequency bands that it will be operating on a non-harmful interference basis. MSV, Inc. must also notify its customers in the United States that its operations are on a non-harmful interference basis."

- Mobile Satellite Ventures Subsidiary LLC, Memorandum Opinion and Order, 17 FCC Rcd 12894 (Deputy Chief, Satellite Division, International Bureau, July 2, 2002) (granting authority to operate additional half-duplex METs with MSV):
  - "9. IT IS FURTHER ORDERED that Mobile Satellite Ventures Subsidiary LLC's MET operations shall be limited to the portions of the 1525-1559 and 1626.5-1660.5 MHz band coordinated for the satellite being accessed in the most recent annual L-band operator-to-operator agreement.
  - 10. IT IS FURTHER ORDERED that, in the absence of a continuing annual operator-to-operator coordination agreement, Mobile Satellite Ventures Subsidiary LLC's operation in the 1525-1559 and 1626.5-1660.5 MHz band will be on a non-harmful interference basis. Consequently, in the absence of a coordination agreement, Mobile Satellite Ventures Subsidiary LLC shall not cause harmful interference to any other lawfully operating satellite or radio facility and shall cease operations upon written notification of such interference. Furthermore, Mobile Satellite Ventures Subsidiary LLC must notify all other operators in these frequency bands that it will be operating on a non-harmful interference basis. MSV, Inc. must also notify its customers in the United States that its operations are on a non-harmful interference basis."
- National Systems & Research Co., Order and Authorization, 17 FCC Rcd 12011 (Deputy Chief, Satellite Division, International Bureau, June 28, 2002) (granting authority to operate METs with MSV):
  - "11. IT IS FURTHER ORDERED that National Systems & Research Co.'s MET operations shall be limited to the portions of the 1525-1559 and 1626.5-1660.5 MHz band coordination for the satellite being accessed in the most recent annual L-band operator-to-operator agreement.
  - 12. IT IS FURTHER ORDERED that in the absence of a continuing annual operator-to-operator coordination agreement, National Systems & Research Co.'s operation in the 1525-1530 MHz, 1530-1544 MHz, 1626.5-1645.5 MHz frequency bands (lower L-band) and the 1545-1559 MHz and 1646.5-1660.5 MHz (upper L-band) frequency bands will be on a non-interference basis until a future operator-to-operator agreement is concluded. National Systems & Research Co. shall not cause harmful interference to any other lawfully operating satellite or radio facility and shall cease operations upon written notification of such interference. Furthermore, National Systems & Research Co. must notify all other operators in these frequency bands that it will be operating on a non-interference basis. National Systems & Research Co. must also notify its customers in the United States that its operations are on a non-harmful interference basis."
- Infosat Communications, Inc., Order and Authorization, 17 FCC Rcd 1610 (January 25, 2002) (granting authority to operate METs with MSV Canada satellite):
  - 14. IT IS FURTHER ORDERED that Infosat Communications, Inc. IS AUTHORIZED to operate in the 1525-1530 MHz, 1530-1544 MHz, and 1626.5-1645.5 MHz frequency bands (lower L-band) subject to the following conditions:

\* \* \*

- b. Operations shall be limited to the portions of the lower L-band coordinated for TMI satellite network in the most recent annual L-band operator-to-operator agreement;
- 15. IT IS FURTHER ORDERED that in the absence of a continuing annual L-band operator-to-operator coordination agreement, Infosat's operations of METs in the 1530-1559 and 1631.5-1660 MHz band will be on a non-harmful interference basis until a future operator-to-operator agreement is concluded. Infosat Communications, Inc. shall not cause harmful interference to any other lawfully operating satellite or radio facility and shall cease operations upon notification of such interference. Furthermore, Infosat Communications, Inc. must notify all other operators in these frequency bands that it will be operating on a non-harmful interference basis. Infosat Communications, Inc. must also notify its customers in the United States that its operations are on a non-harmful interference basis."
- TMI Communications and Company, L.P., Order and Authorization, 15 FCC Rcd 18117 (Chief, Satellite and Radiocommunication Division, September 25, 2000) (granting authority to operate METs with TMI):
  - "8. Accordingly, IT IS ORDERED that Application File No.SES-LIC-19990318-00435 IS GRANTED and TMI Communications and Company, L.P. IS AUTHORIZED to operate up to 100,000 full-duplex tracking and asset management data services mobile earth terminals through the Canadian licensed MSAT-1 space station in portions of the 1545-1558.5 and 1646.5-1660 MHz band coordinated for the TMI satellite network in the most recent annual L-band operator-to-operator coordination agreement, in accordance with the technical specifications set forth in its application and its Radio Station Authorization, and consistent with the Commission's rules.
  - 9. IT IS FURTHER ORDERED that in the absence of an annual operator-to-operator coordination agreement, TMI's operation in the 1545-1558.5 and 1646.5-1660 MHz band will be on a non-interference basis. Consequently, in the absence of a coordination agreement, TMI shall not cause harmful interference to any other lawfully operating satellite or radio facility and shall immediately cease operations upon notification of such interference. Furthermore, TMI must notify the other four space station operators in these frequency bands that it will be operating on a non-interference basis. TMI must also notify its customers in the United States that TMI's operations are on a non-interference basis."
- SatCom Systems, Inc., Order and Authorization, 14 FCC Rcd 20798 (November 30, 1999) (granting authority to operate METs with MSV Canada satellite):
  - "63. Accordingly, IT IS ORDERED that Application File Number 647-DSE-P/L-98; IBFS File Number SES-LIC-19980310-00272E9808159 IS GRANTED and SatCom Systems, Inc. IS AUTHORIZED to operate up to 25,000 mobile earth terminals through the Canadian licensed MSAT-1 space station in the portions of the 1545-1558.5 and 1646.5-1660 MHz band coordinated for the TMI satellite network in the most recent

annual L-band operator-to-operator coordination agreement, to the extent indicated herein, in accordance with the technical specifications set forth in its application and its Radio Station Authorization, and consistent with the Commission's rules. In the absence of a continuing annual L-band operator-to-operator coordination agreement, SatCom's operation in the 1545-1558.5 and 1546.5-1660 MHz bands will be on a non-interference basis until a future operator-to-operator agreement is concluded. In this instance, SatCom must notify the other four operators in these frequency bands that it will be operating on a non-interference basis. SatCom must also notify its customers that SatCom's operations are on a non-interference basis.

64. IT IS FURTHER ORDERED that Application File Number 730-DSE-P/L-98; IBFS File No. SES-LIC-19980330-00339E980179 IS GRANTED and TMI Communications and Company, L.P. IS AUTHORIZED to operate up to 100,000 mobile earth terminals through the Canadian licensed MSAT-1 space station in the portions of the 1545-1558.5 and 1646.5-1660 MHz band coordinated for the TMI satellite network in the most recent annual L-band operator-to-operator coordination agreement, to the extent indicated herein, in accordance with the technical specifications set forth in its application and its Radio Station Authorization, and consistent with the Commission's rules. In the absence of a continuing annual operator-to-operator coordination agreement, TMI's operation in the 1545-1558.5 and 1646.5-1660 MHz band will be on a non-interference basis until a future operator-to-operator agreement is concluded. In this instance, TMI must notify the other four operators in the these frequency bands that it will be operating on a non-interference basis. TMI must also notify its customers in the United States that TMI's operations are on a non-interference basis."

#### Exhibit B

#### Commission Statements Acknowledging Applicability of Spectrum Limitation Condition

• Flexibility for Delivery of Communications by MSS Providers, Report and Order, IB Docket No. 01-185, 18 FCC Rcd 1962 (February 10, 2003) ("ATC Order").

"The parties to the MoU last revised spectrum assignments in 1999 and, pending further negotiations, continue to operate under those assignments today." (¶ 92)

"Although annual meetings were to have taken place under the terms of the Mexico City MoU, these meetings have not occurred since the parties last agreed to a complex spectrum-sharing arrangement in London in 1999; therefore, the parties continue to operate under the 1999 assignments pending further negotiations." (n. 144)

• *Mobile Satellite Ventures Subsidiary LLC, Order and Authorization*, DA 04-3553 (Int'l Bur. 2004):

"The parties to the MOU last revised the spectrum assignments in 1999 and, pending further negotiations, continue to operate with those assignments today." (n.8)

• Flexibility for Delivery of Communications by MSS Providers, Memorandum Opinion and Order and Second Order and ATC Reconsideration Order, IB Docket Nos. 01-185, FCC 05-30 (February 25, 2005) ("ATC Reconsideration Order"):

"These negotiations have not occurred since 1999, and the 1999 coordination agreement remains in effect." (¶ 38)

"The current coordination agreement under which Inmarsat and MSV share L-band spectrum was finalized in 1999. Ideally, the L-band MSS operators should renegotiate their coordination agreement every year. Indeed, changes to the existing coordination agreement could help avoid some of the potential interference issues that could arise from deployment of MSS/ATC. At the same time, however, we acknowledge that it could take a great deal of time and effort to conduct further coordination negotiations. For this reason, in the case of any L-band frequency that is currently the subject of a coordination agreement and is shared between an MSS operator and an MSS/ATC operator, we will permit an MSS/ATC to cause a small increase in interference to another MSS operator's system above the coordinated interference level when the coordinated interference level is already greater than 6% ?T/T. This measure accounts for the reality that MSS is currently operating in the L-band, and that it may be necessary and appropriate to allow a slightly higher level of interference than currently coordinated levels allow in order to permit ATC to begin operations. When L-band MSS operators enter into a new coordination agreement, this additional interference allowance will no longer apply, and MSS/ATC operators will be required to operate its ATC within the limits coordinated by the parties." (¶ 44) (emphasis added)

#### **Technical Certification**

I, Dr. Peter D. Karabinis, Senior Vice President and Chief Technical Officer of Mobile Satellite Ventures Subsidiary LLC, certify under penalty of perjury that:

I am the technically qualified person with overall responsibility for the technical information contained in this Reply. I am familiar with the Commission's rules, and the information contained in the Reply is true and correct to the best of my knowledge and belief.

Dr. Peter D. Karabinis

Dated: January 31, 2006

#### CERTIFICATE OF SERVICE

I, Sylvia A. Davis of the law firm of Pillsbury Winthrop Shaw Pittman LLP, hereby certify that on this 31<sup>st</sup> day of January 2006, served a true copy of the foregoing PUBLIC VERSION upon the following:

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